

Claims

1. Method in a process for preparing extruded articles by flowing heat plastified stream of extrudable resinous thermoplastic material through an extrusion orifice, c h a r a c t e r i z e d in that the method comprises the following step carried out before the extrusion step,

- selectively introducing and mixing modifying additives to the surface portion of the stream of extrudable resinous thermoplastic material.

2. The method of claim 1, c h a r a c t e r i z e d in that the method further comprises the following steps carried out before the extrusion step:

- physically separating the stream into a central core stream and at least one boundary stream on the outside of the core stream;
- while maintaining physical separation of the core and boundary streams, selectively introducing modifying additives to the boundary streams; and thereafter
- recombining the streams prior expelling the material out of the extrusion orifice, said boundary streams being applied as a relatively thin surface layer having altered properties between the core layer and the surfaces of the extrusion orifice.

3. The method of claim 2, c h a r a c t e r i z e d in that the streams are recombined generally near the extrusion orifice.

4. The method of claim 1 or 2, c h a r a c t e r i z e d in that the additives introduced and mixed comprise a mixture having a viscosity modifying component.

5. An extrusion process for preparing extruded articles in which process heat plastified stream of extrudable resinous thermoplastic material is arranged to flow through a extrusion orifice, the process comprising the following steps;

- providing a source of heat plastified extrudable synthetic resinous thermoplastic material;
- advancing the material along a first flow path toward the extrusion orifice,

c h a r a c t e r i z e d by the step carried out before the extrusion step,

- introducing and mixing modifying additives to the surface portion of the material flow.

6. The extrusion process of claim 5, characterized by the further steps

- diverting a portion of material from the first flow path to a second flow path and introducing and mixing modifying additives to the diverted flow; and
- applying the modified material as a relatively thin layer to the surface of the resin flowing in the first flow path prior to passing the material through the extrusion orifice.

7. The process of claim 6, characterized in that the step in which the flow paths are diverted and the step in which the modified material is applied to the first flow path are arranged to be performed before the extrusion orifice.

8. The process of claim 5 or 6, characterized in that the additives introduced and mixed comprise a mixture having a viscosity modifying component.

9. An apparatus for preparing extruded articles by flowing heat plastified stream of extrudable resinous thermoplastic material through an extrusion orifice, characterized in that the apparatus comprises before the extrusion orifice an introducing means for selectively introducing modifying additives to the surface portion of the stream of the stream of extrudable resinous thermoplastic material in order to have altered properties in the material forming the surface portion of the stream.

10. The apparatus of claim 9, characterized in that the apparatus further comprises first means (3) for physically separating the stream into a central core stream and at least one boundary stream on the outside of the core stream, that the introducing means (4) is arranged to introduce modifying additives to the boundary streams while maintaining physical separation of the core and boundary streams and that the apparatus further comprises third means (5) for recombining the streams prior expelling the material out of the extrusion orifice, said boundary streams being applied as a relatively thin surface layer having altered properties between the core layer and the surfaces of the extrusion orifice.

11. The apparatus of claim 10, characterized in that the third means is placed generally near to the extrusion orifice.